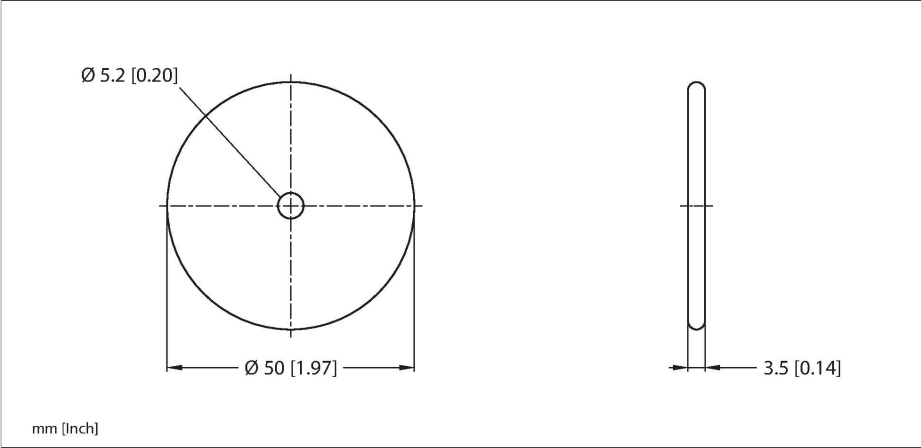


TW-R50-B320  
HF Tag



Technical data

Type	TW-R50-B320
ID	100005246
Remark to product	Not suitable for direct mounting on metal
Data transfer	Inductive coupling
Technology	HF RFID
Operating frequency	13.56 MHz
Radio communication and protocol standards	ISO 15693 NFC Typ 5
Read/Write distance max.	462 mm
Design	Hard tag, R50
Housing material	Plastic, PA6
Active area material	Plastic, PA6, black
Protection class	IP69K
Tightening torque	≤ 6.5 Nm
Packaging unit	1

Technical data

Type	TW-R50-B320
ID	100005246
Remark to product	Not suitable for direct mounting on metal
Data transfer	Inductive coupling
Technology	HF RFID
Operating frequency	13.56 MHz
Memory type	EEPROM
Chip	NXP I-Code SLIX2
Memory size	320 Byte
Memory	Read/Write
Freely usable memory	316 Byte



Features

- The tags must undergo adequate stress tests within the proposed temperature processes before deployment.
- The following stress test was performed on this tag:  
Cyclic temperature stress: 5 min at -40 °C – 5 min at 90 °C  
Number of tested cycles: 100, transition period: 30 seconds  
Continuous load: 140 °C for 100 hours
- This successfully performed test does not imply suitability for a specific application, but merely serves as proof of the basic usability.
- EEPROM, memory 320 byte
- Not for direct mounting on metal

Functional principle

The HF read/write devices operating at a frequency of 13.56 MHz form a transmission zone the size of which (0...500 mm) varies, depending on the combination of read/write head and tag used.

The read/write distances mentioned here only represent standard values measured under laboratory conditions, free from any influences caused by surrounding materials.

The read/write distances of tags suitable for mounting in/on metal were determined in/on metal.

Attainable distances may vary by up to 30 % due to component tolerances, mounting conditions, ambient conditions and material qualities (especially when mounted in metal).

Testing of the application under real operating conditions is therefore essential, especially with on-the-fly reading and writing!

## Technical data

	Password-protected access to the data in the tag possible (requires firmware Xv98 or higher in the read/write device)
Number of read operations	unlimited
Number of write operations	10 <sup>5</sup>
Typical read time	2 ms/Byte
Typical write time	3 ms/Byte
Radio communication and protocol standards	ISO 15693 NFC Typ 5
Minimum distance to metal	10 mm
Temperature during read/write access	-40...+85 °C
Temperature outside detection range	-45...+85 °C
	140 °C, 1 × 100 h
Design	Hard tag, R50
Diameter	50 mm +/- 0.5 mm
Internal diameter	5.2 mm +/- 0.3 mm
Housing height	3.5 mm +/- 0.5 mm
Housing material	Plastic, PA6
Active area material	Plastic, PA6, black
Tightening torque	≤ 6.5 Nm
Protection class	IP69K
Packaging unit	1